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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/032,717	10/23/2001	Andre R. Abad	35718/237005 (5718-118)	5409
826 7590 01/29/2009 ALSTON & BIRD LLP BANK OF AMERICA PLAZA 101 SOUTH TRYON STREET, SUITE 4000 CHARLOTTE, NC 28280-4000			EXAMINER KUBELIK, ANNE R	
			ART UNIT 1638	PAPER NUMBER
			MAIL DATE 01/29/2009	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Advisory Action**  
**Before the Filing of an Appeal Brief**

**Application No.**

10/032,717

**Applicant(s)**

ABAD ET AL.

**Examiner**

Anne R. Kubelik

**Art Unit**

1638

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 21 January 2009 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☐ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  
Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: 39, 40, 44, 45, 50 and 51.  
Claim(s) rejected: 17, 18, 38, 43, 46, 49, 52, 55-64.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☐ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_.  
13. ☒ Other: See Continuation Sheet.

/Anne R. Kubelik/  
Primary Examiner, Art Unit 1638

Continuation of 11. does NOT place the application in condition for allowance because:  
103 over Michaels et al:

Applicant urges that the facts of the instant case are different from Kubin in that the art was not in possession of a monoclonal antibody, and no teaching of how to make one of the claimed sequences is present. This is not persuasive because a monoclonal antibody would not be required to make nucleic acids encoding variants of the protein taught by Michaels. All that would be required is knowledge of the structure of Cry endotoxins and of how to make amino acid and nucleotide substitutions. Both of these are well-established in the art. .

Applicant urges that Kubin is not in line with Deuel. This is not persuasive because Kubin is presidential, until and if it is overturned.

Applicant urges that the case differs from KSR because it does not rely on a combination of known prior art elements. This is not persuasive because the known prior art elements are the nucleic acid taught by '534 and the knowledge in the art for making variants of Cry endotoxins.

Applicant urges that the prior art does not suggest the modifications necessary to achieve the claimed molecule; SEQ ID NO:1 and 2 are previously unknown, and there was no reason to modify SEQ ID NO:3 of '534 to obtain a molecule with 90% identity to SEQ ID NO:1. This is not persuasive. The protein taught by '534, SEQ ID NO:4, has 79.8% identity to the instant SEQ ID NO:2. Nucleic acids with 90% identity to SEQ ID NO:1 encode proteins with 70% identity to SEQ ID NO:2. Michaels suggests making variants of SEQ ID NO:4, and the art teaches how to make such variants. In doing so nucleic acids with 90%-95% identity to SEQ ID NO:1 would be made obvious.

Applicant urges that '534 does not provide guidance for modifying SEQ ID NO:3 to make an endotoxin specific for rootworm, potato beetle or boll weevil. This is not persuasive. Western corn rootworm (*Diabrotica virgifera*), southern corn rootworm (*Diabrotica undecimpunctata howardi*), Colorado potato beetle (*Leptinotarsa decemlineata*), and boll weevil (*Anthonomus grandis*) are also scarab pests. There is no evidence that SEQ ID NO:3 is not active against one or all of these.

Continuation of 13. Other: claims 39,40,44,45,50 and 51 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The examiner apologizes for omitting this in the prior Office action..